Amendments to the Specification:

Please replace the paragraph on page 14, line 17, to page 15, line 4, with the following paragraph:

In accordance with an added feature of the invention, the layer thickness of the semiconductor body has a specific sheet charge density [ρ] ρ_F in a direction z between the pn junction and the second main surface such that:

$$\int_0^W \rho_F(z)dz \le 0.9Q_c\ ,\quad \rho_F = \int \rho dF$$

in which ρ is the volume charge density, Q_c, the critical breakdown charge, denotes a critical value of the charge quantity Q at which the electrical breakdown is reached, said charge quantity Q being linked to said electric field strength E between said first electrode and said second electrode by the equations

$$\int_0^W \rho_F(z)dz = Q$$ and Poisson's equation ~~$\nabla E = 4\pi\rho$~~ $\underline{\nabla E = 4\pi\rho}$.

Please replace the paragraph on page 20, line 4, to page 20, line 23, with the following paragraph:

The critical value E_c of the field strength is linked to a charge density ρ by Poisson's equation

~~$\vec{\nabla}.\vec{E} = -4\pi\rho$~~ $\vec{\nabla}.\vec{E} = 4\pi\rho$, (1)

so that a relationship with a critical breakdown surface charge Q_c can be derived:

$$\int_0^{Wsc} \rho_F(z)dz \le Q_c \qquad (2)$$

W_{sc} denotes the width of the space charge region (i.e. the region with $|\vec{E}| \neq 0$) when the electric field reaches the critical field strength E_c. According to the invention, the layer thickness W should then be selected in such a way that the space charge zone reaches the second main surface 3 before the field strength takes on the critical value E_c. In this case, the integration in following equation (3) has to be carried out over the entire layer thickness W of the semiconductor body 1 between the pn-junction between the semiconductor body 1 and the body zone 4 and the second semiconductor surface 3. In other words, the integral in Equation (2) should, for example, reach at most the value 0.9 Q_c so that, in the vertically structured power semiconductor component according to the invention, the following equation is satisfied:

$$\int_0^{W} \rho_F(z)dz \le 0.9Q_c \,, \quad \rho_F = \int \rho dF \,. \qquad (3)$$